

Stem cells and interspecies chimaeras.

Journal: Nature

Publication Year: 2016

Authors: Jun Wu, Henry T Greely, Rudolf Jaenisch, Hiromitsu Nakauchi, Janet Rossant, Juan Carlos Izpisua Belmonte

PubMed link: 27905428

Funding Grants: Generation of functional cells and organs from iPSCs

Public Summary:

Chimeras are organism containing a mixture of genetically different tissues, formed by process of fusion of early embryo, grafting, or mutation. Recent advances in identifying and generation of many different kinds of stem cells, have opened the field to creating new mammalian interspecies chimeras and further the understanding of fundamental biology as well providing future clinical therapies.

Scientific Abstract:

Chimaeras are both monsters of the ancient imagination and a long-established research tool. Recent advances, particularly those dealing with the identification and generation of various kinds of stem cells, have broadened the repertoire and utility of mammalian interspecies chimaeras and carved out new paths towards understanding fundamental biology as well as potential clinical applications.

Source URL: <https://www.cirm.ca.gov/about-cirm/publications/stem-cells-and-interspecies-chimaeras>